

**AMENDMENTS TO THE CLAIMS**

1. (Currently amended) An information recording/reproducing apparatus that performs reading and writing of information with respect to an information recording medium in which user data areas and alternative areas are alternately arranged, said apparatus comprising:

a device for reading and writing the information; and

means for,

performing a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the device, on an unformatted information recording medium, on ~~with respect to~~ the user data areas and the alternative areas in a predetermined sequence, and

selecting an alternative destination for replacing a defective portion[[,]] when an error occurs during the certify process or the verify process performed ~~with respect to~~ on one of the user data areas[[,]] such that,

an alternative destination is selected from an adjacent alternative area corresponding to the user data area when an unused field exists in the adjacent alternative area, and

~~such that~~ the alternative destination is selected from another a pre-certified and pre-verified non-adjacent alternative area wherein the pre-verification is performed at the time of recording user data, on which the certify process and the verify process have already been performed according to the predetermined sequence in the case where when an unused field does not exist in the adjacent alternative area,

wherein each user data area is preceded by a corresponding adjacent alternative area.

2. (Currently amended) The information recording/reproducing apparatus as claimed in claim 1, further comprising:

means for performing the certify process and the verify process on the nonadjacent alternative area having the alternative destination[[,]] when the error occurs in the certify process or the verify process and the alternative destination is to be assigned[[,]] ~~in the case where~~ when the certify process and the verify process are not performed on the non-adjacent alternative area having the alternative destination, ~~the certify process and the verify process on the alternative area having the alternative destination~~; and

means for assigning the alternative destination in the non-adjacent alternative area in which the error occurs[[,]] when an error occurs in the certify process or the verify process performed by said means for performing the certify process and the verify process, ~~the alternative destination in an alternative area other than the alternative area in which the error occurs.~~

3. (Currently amended) The information recording/reproducing apparatus as claimed in claim 1, further comprising:

means for performing the certify process and the verify process on the non-adjacent alternative area ~~first~~ before the user data area; and

means for registering, as a prohibited-use ~~position the use of which is prohibited~~, a position in the alternative area at which ~~position~~ an error occurs in the certify process or the verify process performed by the means for performing the certify process and the verify process.

4. (Currently amended) The information recording/reproducing apparatus as claimed in claim 1, further comprising:

means for maintaining a position at which the error occurs when the certify process or the verify process is performed on the one of the user data areas; and

means for assigning, ~~after the certify process and the verify process are performed on the alternative area,~~ the alternative destination ~~with respect to the user data area having the maintained position after the certify process and the verify process are performed on the non-adjacent alternative area.~~

5. (Currently amended) An information recording/reproducing apparatus that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas, ~~corresponding to the respective user data areas and each data area having an adjacent alternative~~ field for replacing a defect field in the user data areas, said apparatus comprising:

a formatting part that performs a format process with respect to the user data areas and the alternative areas in a predetermined sequence;

a defect field detection part that detects a defect field by performing a certify process that writes specifically patterned data at the time of a format process or and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the apparatus, while recording of information before the format process is completed ~~with respect to~~ for all the user data areas and all the alternative areas;

a first usable field determination part that determines whether an unfilled adjacent alternative field ~~allowing replacement~~ exists in the adjacent alternative area corresponding to the user data area having the defect field detected by said defect field detection part; and

a first alternative field assigning part that assigns, ~~when said first usable field determination part determines that the alternative field does not exist,~~ as an alternative field ~~for replacing the defect field, an alternative field in another~~ a non-adjacent alternative area to which the format process has already been performed according to the predetermined sequence, when said first usable field determination part determines that the alternative field does not exist,

wherein each user data area is preceded by a corresponding adjacent alternative area.

6. (Currently amended) The information recording/reproducing apparatus as claimed in claim 5, further comprising:

a formatted alternative area determination part that determines whether ~~an~~ the non-adjacent alternative area exists on which the format process is performed;

a second alternative field assigning part that assigns, ~~when said formatted alternative area determination part determines that an alternative area does not exist on which area the format process is performed,~~ a predetermined alternative field in ~~an~~ the non-adjacent alternative area on which the format process is not performed as an alternative field for the defect field when said formatted alternative area determination part determines that the non-adjacent alternative area on which area the format process is performed does not exist; and

an alternative field format process part that performs a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the apparatus, on an unformatted information recording medium on the alternative field assigned by said second alternative field assigning part.

7. (Currently amended) The information recording/reproducing apparatus as claimed in claim 6, further comprising:

a use prohibition part that, ~~when the defect detection part detects an alternative field on which the format process is performed by the alternative field format process part as a defect field,~~ prohibits use of the defect field when the defect detection part detects an alternative field, on which the format process is performed, is defective, wherein the second alternative field assigning part assigns, as an alternative field for the defect field, another alternative field in the non-adjacent alternative area including the alternative field the use of which is prohibited by said use prohibition part.

8. (Currently amended) The information recording/reproducing apparatus as claimed in claim 6, further comprising:

a second usable field determination part that determines, ~~when the formatted alternative area determination part determines that an alternative area exists on which the format process is performed,~~ whether an alternative field allowing replacement exists in the non-adjacent alternative area on which the format process is performed, when the defect detection part detects an alternative field on which the format process is performed by the alternative field format process,

wherein, when the second usable field determination part determines that an alternative field allowing replacement does not exist, the second alternative field assigning part assigns, as an alternative field for the defect field, a predetermined field in ~~an~~ a non-adjacent alternative area on which the format process is not performed.

9. (Currently amended) The information recording/reproducing apparatus as claimed in claim 7, further comprising:

a second usable field determination part that determines, ~~when the formatted alternative area determination part determines that an alternative area exists on which the format process is performed,~~ whether an alternative field allowing replacement exists in the non-adjacent alternative area on which the format process is performed when the formatted alternative area determination part determines that an alternative area exists on which the format process is performed,

wherein, when the second usable field determination part determines that an alternative field allowing replacement does not exist, the second alternative field assigning part assigns, ~~as an alternative field for the defect field,~~ a predetermined field in ~~an~~ a non-adjacent alternative area on which the format process is not performed as an alternative field for the defect field.

10. (Currently amended) An information recording/reproducing apparatus that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas corresponding to the respective user data areas and each user data area having an alternative field for replacing a defect field in the user data areas, said apparatus comprising:

an alternative area format process part that performs a format process including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the apparatus on an unformatted recording medium, wherein on the alternative areas are formatted separately from the user data areas;

a formatting part that performs a format process with respect to the user data areas in a predetermined sequence with the format process in the alternative areas;

a defect field detection part that detects a defect field existing in the alternative area at the time of the format process by said alternative area format process part before the format process is completed with respect to all the user data areas and all the alternative areas; and

a use prohibition part that prohibits, when the defect field is detected by said defect field detection part, using the defect field as the alternative field,

wherein each user data area is preceded by a corresponding adjacent alternative area.

11. (Currently amended) An information recording/reproducing apparatus that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas corresponding to the respective user data areas and each adjacent alternative area having an alternative field for replacing a defect field in the user data areas, said apparatus comprising:

a formatting part that performs a format process, ~~with respect~~ including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the apparatus, to the user data areas and the alternative areas in a predetermined sequence;

an error detection part that detects an error that occurs at the time of the format process on an unformatted recording medium;

a usable field determination part that determines whether a field allowing replacement exists in the an alternative area corresponding adjacent to the user data area in which the error detected by said error detection part occurs;

an error occurrence position information maintaining part that maintains, ~~when said usable field determination part determines that the field allowing replacement does not exist,~~ information relating to a position at which the error occurs when said usable field determination part determines that the field allowing replacement does not exist; and

an alternative field assigning part that assigns, after the format process ends, an alternative field for replacing the defect field based on the information maintained by said error occurrence position information maintaining part,

wherein each user data area is preceded by a corresponding adjacent alternative area.

12-14. (Canceled)

15. (Currently amended) A computer-readable recording medium recording a program for causing a computer to carry out:

a procedure that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of alternative areas ~~corresponding adjacent~~ to the respective user data areas and each

adjacent alternative area having an alternative field for replacing a defect field in the user data areas;

a formatting part that performs a format process, including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the program on an unformatted recording medium, with respect to the user data areas and the alternative areas in a predetermined sequence;

a defect field detection procedure that detects the defect field at the time of recording of information ~~or the format process~~ before the format process is completed with respect to all the user data areas and all the alternative areas;

a first usable field determination procedure that determines whether an alternative field allowing replacement exists in the adjacent alternative area corresponding to the user data area having the defect field detected in said defect field detection procedure; and

a first alternative field assigning procedure that assigns, when said first usable field determination procedure determines that the alternative field does not exist, ~~an~~ a non-adjacent alternative field in another alternative area to which the format process has already been performed according to the predetermined sequence as an alternative field for replacing the defect field,

wherein each user data area is preceded by a corresponding adjacent alternative area.

16. (Currently amended) A computer-readable recording medium recording a program for causing a computer to carry out:

a procedure that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of alternative areas corresponding to the respective user data areas and each alternative area having an alternative field for replacing a defect field in the user data areas;



an alternative area format process procedure that performs a format process, including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the program on an unformatted recording medium, on the alternative areas separately from the user data areas;

a formatting part that performs a format process with respect to the user data areas in a predetermined sequence with the format process in the alternative areas;

a defect field detection procedure that detects, at the time of the format process in said alternative area format process procedure, a defect field existing in the alternative areas before the format process is completed with respect to all the user data areas and all the alternative areas; and

a use prohibition procedure that prohibits, when the defect field is detected in said defect field detection procedure, use of the defect field as an alternative field,

wherein each user data area is preceded by a corresponding adjacent alternative area.

17. (Currently amended) A computer-readable recording medium recording a program for causing a computer to carry out:

a procedure that performs recording and reproducing of information with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of alternative areas corresponding to the respective user data areas and each having an alternative field for replacing a defect field in the user data areas;

a formatting part that performs a format process, including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the process on an unformatted recording medium, with respect to the user data areas and the alternative areas in a predetermined sequence;

an error detection procedure that detects an error that occurs at the time of the format process;

a usable field determination procedure that determines whether an alternative field allowing replacement exists in the alternative area corresponding to the user data area in which the error detected in said error detection procedure occurs;

an error occurrence position information maintaining procedure that maintains, ~~when said usable field determination procedure determines that the alternative area does not exist,~~ information relating to a position at which the error occurs when said usable field determination procedure determines that the alternative area does not exist; and

an alternative area assigning procedure that assigns, after the format process ends, an alternative field for replacing the defect field based on the information maintained in said error occurrence position information maintaining procedure,

wherein each user data area is preceded by a corresponding adjacent alternative area.

18. (Currently amended) A defect field management method of managing an alternative field ~~with respect to~~ of a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas corresponding to the respective user data areas and each having an alternative field for replacing ~~the~~ a defect field in the user data areas, said method comprising the steps of:

performing a format process, including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the method on an unformatted recording medium, with respect to the user data areas and the alternative areas in a predetermined sequence;

detecting the defect field at the time of recording of information ~~or the format process~~ before the format process is completed with respect to all the user data areas and all the alternative areas;

determining whether an alternative field allowing replacement exists in the adjacent alternative area corresponding to the user data area having the detected defect field; and

assigning, when said step of determining determines that the alternative field allowing replacement does not exist, an alternative field in a non-adjacent ~~another~~ alternative area on which the format process has already been performed according to the predetermined sequence as an alternative field for replacing the defect field,

wherein each user data area is preceded by a corresponding adjacent alternative area.

19. (Currently amended) A defect field management method of managing an alternative field with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas corresponding to the respective user data areas and each having an alternative field for replacing the defect field in the user data areas, said method comprising the steps of:

performing a format process, including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the method on an unformatted recording medium, on the alternative areas separately from the user data areas;

performing a format process with respect to the user data areas in a predetermined sequence with the format process in the alternative areas;

detecting, at the time of the format process in said step of performing the format process, a defect field existing in the adjacent alternative areas before the format process is completed with respect to all the user data areas and all the alternative areas; and

prohibiting use of the detected defect field as the alternative field,

wherein each user data area is preceded by a corresponding adjacent alternative area.

20. (Currently amended) A defect field management method of managing an alternative field with respect to a recording medium having a plurality of user data areas for recording user data therein and a plurality of adjacent alternative areas corresponding to the respective user data areas and each having an alternative field for replacing the defect field in the user data areas, said method comprising the steps of:

performing a format process with respect to the user data areas and the alternative areas in a predetermined sequence, the format process including a certify process that writes specifically patterned data and a verify process that uses defect detection conditions stricter than the normal reproduction standards of the method on an unformatted recording medium;

detecting an error that occurs at the time of the format process;

determining whether an alternative field allowing replacement exists in the adjacent alternative area corresponding to the user data area in which the detected error occurs;

maintaining, when the step of determining determines that the alternative field allowing replacement does not exist, information relating to a position at which the error occurs; and

assigning, after the format process ends, an alternative field for replacing the defect field based on the information maintained in the step of maintaining the information,

wherein each user data area is preceded by a corresponding adjacent alternative area.